



**EXISTING SIGNS**

MD 185 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

32, 33 R3-18 (30"x30")

30, 42 R10-11b (24"x24")

35 R3-5L (30"x36")

31 Kensington Pkwy D-3(1) MOD (VAR. x16")

29 Jones Bridge Rd D-3(1) MOD (VAR. x16")

40, 44 Connecticut Ave D-3(1) MOD (VAR. x16")

38 R3-6R (30"x36")

39 R3-6L MOD (42"x36") BLACK ON WHITE

41 R3-5d (30"x36")

46 R3-2 (30"x30")

43 R3-5R (30"x36")

**PROPOSED SIGNS**

28, 36 R3-18 (30"x30")

37 Jones Bridge Rd D-3(1) (VAR. x16") DUAL-FACE

47 NORTH MARYLAND 185 30"x48"

48 SOUTH MARYLAND 185 36"x72"

49 SOUTH MARYLAND 185 30"x48"

50 NORTH MARYLAND 185 36"x72"

**ASSOCIATED SIGN ASSEMBLIES (POLE-MOUNTED)**

25p R10-3(1) 9' x 15'

26+ R10-3(1) 9' x 15'

27+ R10-3(1) 9' x 15'

PUSHBUTTON SIGN NUMBERS INDICATE THE ASSOCIATED PEDESTRIAN SIGNAL HEAD NUMBERS

**PROPOSED SIGN TO BE BAGGED**

25p R10-3(1) 9' x 15'

**TEMPORARY SIGNS**

26+ R10-3(1) 9' x 15'

27+ R10-3(1) 9' x 15'

PUSHBUTTON SIGN NUMBERS INDICATE THE ASSOCIATED PEDESTRIAN SIGNAL HEAD NUMBERS

- CONSTRUCTION DETAILS**
- INSTALL PROPOSED LED TRAFFIC SIGNAL HEADS, COUNTDOWN PEDESTRIAN SIGNAL HEAD, VIDEO DETECTION CAMERA AND SIGNS ONTO THE EXISTING SIGNAL POLE AND MAST ARM PRIOR TO THE START OF PHASE 2B CONSTRUCTION. INSTALL SIGNAL HEADS AND SIGNS; CONNECT TO THE EXISTING WIRING.
  - INSTALL 10' (CUT DOWN TO 5') PEDESTAL POLE WITH AUDIBLE PUSHBUTTON STATION AND SIGN (NOTE: 1-2" SCHEDULE 80 PVC CONDUIT WITH 90° BEND).
  - USE EXISTING HANDHOLE.
  - USE EXISTING CONDUIT.
  - INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
  - TEMPORARY STOP LINE (SEE PEDESTRIAN/TRANSIT MOT PLAN).
  - TEMPORARY CROSSWALK (SEE PEDESTRIAN/TRANSIT MOT PLAN).
  - CONNECT PROPOSED EQUIPMENT IN THE EXISTING CONTROLLER CABINET.
  - DURING THIS PHASE OF CONSTRUCTION THIS PEDESTRIAN RAMP SHALL BE CLOSED TO PEDESTRIAN TRAFFIC.
  - REMOVE EXISTING CROSSWALK (SEE PEDESTRIAN/TRANSIT MOT PLAN).
  - INSTALL PROPOSED AND SHIELD ASSEMBLIES ON EXISTING SIGNAL POLE.
  - INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED) FOR TEMPORARY INSTALLATION FOR TEMPORARY PEDESTRIAN SIGNAL AND PUSHBUTTON.
  - INSTALL 10' PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PUSHBUTTON STATION AND SIGN (NOTE: 1-2" SCHEDULE 80 PVC CONDUIT WITH 90° BEND).

**GEOMETRIC LEGEND**

— — — — — EXISTING

— — — — — PROPOSED

**UTILITY LEGEND**

—SD—SD— STORM DRAIN

—G—G— GAS MAIN

—W—W— WATER MAIN

—S—S— SEWER MAIN

—E—E— ELECTRIC CABLES

—A—A— AERIAL CABLES

—T—T— TELEPHONE CABLES

—F—F— FIBER-OPTIC

**PHASE 2B - STAGE 1**

**CENTURY ENGINEERING**

CONSULTING ENGINEERS - PLANNERS

10710 GILROY ROAD

HUNT VALLEY, MD 21031

REVISION 'C' 23299.62

**APPROVALS**

TEAM LEADER

ASST. DIV. CHIEF

DIVISION CHIEF

OFFICE DIRECTOR

**REVISIONS**

1. ROADWAY WIDENING & SIGNAL RECON. SHA # MOG935570 10/2011

2. REBUILD TO MAINT ARM ADD SAMPLING STATIONS N-600-501-372

**SHA** STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY

TRAFFIC ENGINEERING DESIGN DIVISION

BRAC INTERSECTION IMPROVEMENTS

MD 185 (CONNECTICUT AVENUE) AT JONES BRIDGE ROAD AND KENSINGTON PKWY.

BETHESDA, MD

**MOT PHASE 2B (STAGE 1) - TRAFFIC SIGNAL PLAN**

SCALE 1" = 20' ADVERTISED DATE JUNE 1990 CONTRACT NO. BW-339-802-312

DESIGNED BY R.J. MILSTEAD COUNTY MONTGOMERY

DRAWN BY J.Y. ASHCRAFT LOGMILE 15018502.22

CHECKED BY TMS NO.

F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 2649C DRAWING SG-05.2 OF 12 SHEET NO. 105 OF 123

**NEMA PHASING**

01 02 03 04 08 04 ALT.

FLASHING OPERATION

NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
  - ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, AND THE HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS TO MEET CLEARANCES AS SPECIFIED IN MD STD. 816.03, MD STD. 818.01, MD 818.02, AND MD STD. 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL PROPOSED SIGNAL EQUIPMENT.
  - PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
  - LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E-09 AND FIG. 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED AND APPROVED BY THE DIRECTOR OF THE OFFICE OF TRAFFIC AND SAFETY.
  - PROPOSED SIGNAL EQUIPMENT SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF THE SIDEWALK AND PEDESTRIAN RAMPS, AND THE INSTALLATION OF DETECTABLE WARNING SURFACES.
  - THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNUSED CABLES FROM EXISTING HANDHOLES AND CONDUITS UTILIZED FOR REVISION 'C'.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND FOR PROPERLY LABELING EACH CABLE.
  - VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
  - THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
  - PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
  - FOR FINAL PAVEMENT MARKINGS, REFER TO THE PAVEMENT MARKING PLAN, OTHER THAN THOSE DETAILED ON THIS PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MD SHA STANDARDS.
  - ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
- MOT PHASE 2B (STAGE 1) NOTES**
- PHASE 2B - STAGE 1 CONSTRUCTION WILL INVOLVE RECONSTRUCTION OF THE SIDEWALK, PEDESTRIAN RAMP, AND CURB AND GUTTER IN THE SOUTHWEST OF THE INTERSECTION OF MD 185 AT JONES BRIDGE ROAD. RECONSTRUCTION OF CURB AND GUTTER AND PEDESTRIAN RAMPS ON THE ISLAND IN THE SOUTHWEST QUADRANT OF THE MD 185 AT JONES BRIDGE ROAD.
  - INSTALL PROPOSED LED SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERAS ONTO EXISTING SIGNAL POLE DURING THIS PHASE.
  - TRAFFIC SIGNALS MUST BE OPERATIONAL PER THESE PLANS PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS (TCP) FOR THE CONSTRUCTION WORK.
  - PEDESTRIAN COUNTDOWN SIGNALS WILL BE INSTALLED IN PHASE 3; THESE SIGNALS WILL NOT BE ACTIVATED UNTIL THE END OF CONSTRUCTION FOR THIS STAGE. WITH THE EXCEPTION OF SIGNALS #26 AND #27, WHICH MUST BE INSTALLED AND OPERATIONAL AT THE START OF PHASE 2B. MAINTENANCE OF PEDESTRIAN TRAFFIC WILL BE DETAILED IN THE TCP. INSTALLED PUSHBUTTONS SHALL NOT BE ACTIVATED UNTIL THE SIGNAL IS FULLY OPERATIONAL.